AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (original): A radiation image information recording/reading apparatus comprising:

an image recording unit for recording radiation image information in a stimulable phosphor sheet by irradiating radiation representing the radiation image information on the sheet;

stimulating-ray main scan means for carrying out main scan of the sheet having the radiation image information therein with excitation light irradiated from a side opposite a side of irradiation of the radiation;

vertical scan means for relatively moving either the stimulable phosphor sheet or the stimulating-ray main scan means to the other in a direction crossing a direction of the main scan;

photoelectric detection means for detecting phosphorescent light emitted from an area in the sheet on which the excitation light have been irradiated, from a side of irradiation of the excitation light and from a side opposite of the radiation irradiation; and

erasing means for releasing residual radiation energy from the sheet after reading the light, prior to recording of another image in the sheet by the image recording unit, wherein

the excitation light main scan means comprises a linear light source for emitting the excitation light in the form of fan beams, and the photoelectric detection means comprises a line sensor.

2. (original): A radiation image information recording/reading apparatus as defined in Claim 1, wherein

the stimulable phosphor sheet is a stimulable phosphor sheet having a stimulable phosphor layer and a reflection layer for reflecting the phosphorescent light and

the stimulable phosphor sheet is scanned with the excitation light in a state where the stimulable phosphor layer is located closer to the excitation light main scan means and the reflection layer is located farther from the excitation light main scan means.

3. (original): A radiation image information recording/reading apparatus as defined in Claim 1, wherein

the stimulable phosphor sheet is ananisotropic stimulable phosphor sheet for restricting spread of the excitation light and/or the phosphorescent light within the sheet.

4. (original): A radiation image information recording/reading apparatus as defined in Claim 2, wherein

the stimulable phosphor sheet is an anisotropic stimulable phosphor sheet for restricting spread of the excitation light and/or the phosphorescent light within the sheet.

5. (original): A radiation image information recording/reading apparatus as defined in any one of Claims 1 to 4, further comprising:

a radiation absorption plate placed close to a surface of the sheet on the side opposite of the side of the radiation irradiation at the time of the radiation irradiation on the sheet and moved away from the sheet after the radiation irradiation.

6. (new) A radiation image information recording/reading apparatus as defined in claim 1, wherein the linear light source comprises:

a laser diode array; and

a cylindrical lens.

7. (new) A radiation image information recording/reading apparatus as defined in claim 1, further comprising the stimulable phosphor sheet.

8. (new) A radiation image information recording/reading apparatus as defined in claim 1, wherein the stimulable phosphor sheet comprises an anisotropic stimulable phosphor sheet having a plurality of minute cells divided by a reflective partitioning material for reflecting the light.

9. (new) A radiation image information recording/reading apparatus as defined in claim 8, wherein the reflective partitioning material extends in a direction of thickness of the stimulable phosphor sheet.

10. (new) A radiation image information recording/reading apparatus as defined in claim 1, wherein the stimulable phosphor sheet comprises an anisotropic stimulable phosphor sheet having a plurality of columnar crystals.

11. (new) A radiation image information recording/reading apparatus as defined in claim 10, wherein the columnar crystals extend in a direction of thickness of the stimulable phosphor sheet.

12. (new) The apparatus as defined in claim 1, wherein the apparatus comprises detecting means disposed on only one side of the stimulable phosphor sheet.

13. (new) The apparatus of claim 12, wherein the apparatus comprises scan means disposed on only one side of the stimulable phosphor sheet.

14. (new) The apparatus of claim 5 further comprising a moving device for moving the radiation absorption plate.